



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C07K 7/06, A61K 38/08, C07K 1/00</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 97/22621</b> <b>(43) International Publication Date:</b> 26 June 1997 (26.06.97)
<b>(21) International Application Number:</b> PCT/EP96/05518 <b>(22) International Filing Date:</b> 11 December 1996 (11.12.96) <b>(30) Priority Data:</b> 08/573,422 15 December 1995 (15.12.95) US <b>(71) Applicant (for all designated States except US):</b> BASF AKTIENGESELLSCHAFT [DE/DE]; D-67056 Ludwigshafen (DE). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> AMBERG, Wilhelm [DE/DE]; Steltiner Ring 24, D-61381 Friedrichsdorf (DE). BARLOZZARI, Teresa [IT/US]; 24 South Woodside Avenue, Wellesley, MA 02181 (US). BERNARD, Harald [DE/DE]; Valentin-Ostertag-Strasse 2, D-67098 Bad Dürkheim (DE). BUSCHMANN, Ernst [DE/DE]; Georg-Ludwig-Krebs-Strasse 10, D-67069 Ludwigshafen (DE). HAUPT, Andreas [DE/US]; 2 Rosewood Place, Westborough, MA 01581 (US). HEGE, Hans-Guenther [DE/DE]; Dinkelackerring 29, D-67435 Neustadt (DE). JANSSEN, Bernd [DE/DE]; Leuschnerstrasse 18a, D-67063 Ludwigshafen (DE). KLING, Andreas [DE/DE]; Riegeler Weg 14, D-68239 Mannheim (DE). LIETZ, Helmut [DE/DE]; Raiffeisenstrasse 15, D-67435 Neustadt (DE). RITTER,		Kurt [DE/US]; 9 Burton Avenue, Newton, MA 02158 (US). ULLRICH, Martina [DE/DE]; Im Rappenbuckelweg 16, D-69198 Schriesheim (DE). WEYMANN, Jürgen [DE/DE]; Seebacher Strasse 23, D-67098 Bad Dürkheim (DE). ZIERKE, Thomas [DE/DE]; Akazienstrasse 12, D-67459 Böhl-Iggelheim (DE). <b>(74) Common Representative:</b> BASF AKTIENGESELLSCHAFT; D-67056 Ludwigshafen (DE). <b>(81) Designated States:</b> AU, BG, BR, CA, CN, CZ, GE, HU, IL, JP, KR, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <b>(88) Date of publication of the international search report:</b> 26 February 1998 (26.02.98)
<b>(54) Title:</b> ANTINEOPLASTIC PEPTIDES <b>(57) Abstract</b> <p>Novel peptides of the following formula (I): <math>R^1R^2N-CHX-CO-A-B-D-E-(G)_s-K</math> in which <math>R^1</math>, <math>R^2</math>, A, B, D, E, G, K, X, and s have the meanings stated in the description, and the preparation thereof are described. The novel peptides have an antineoplastic effect.</p>		

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# INTERNATIONAL SEARCH REPORT

Intern. Appl. No.

PCT/EP 96/05518

<b>A. CLASSIFICATION / SUBJECT MATTER</b> IPC 6 C07K7/06 A61K38/08 C07K1/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 6 C07K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93 23424 A (BASF AG ;HAUPT ANDREAS (DE); EMLING FRANZ (DE); ROMERDAHL CYNTHIA) 25 November 1993 see the whole document ---	1-9
X	DE 44 15 998 A (BASF AG) 9 November 1995 see claims ---	1-9
E	WO 97 17364 A (BASF AG ;KLING ANDREAS (DE); JANSSEN BERND (DE); AMBERG WILHELM (D) 15 May 1997 see the whole document ---	1-9
E	WO 96 40752 A (BASF AG) 19 December 1996 see claims -----	1-9
<div style="display: flex; justify-content: space-between;"> <span><input type="checkbox"/> Further documents are listed in the continuation of box C.</span> <span><input checked="" type="checkbox"/> Patent family members are listed in annex.</span> </div>		
<div style="display: flex;"> <div style="flex: 1;"> <p>* Special categories of cited documents :</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="flex: 1;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"Z" document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search  <div style="text-align: center; font-weight: bold;">18 December 1997</div>		Date of mailing of the international search report  <div style="text-align: center; font-weight: bold;">15.01.98</div>
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  <div style="text-align: center; font-weight: bold;">Chakravarty, A</div>

Form PCT/ISA/210 (second sheet) (July 1992)

# INTERNATIONAL SEARCH REPORT

International application No.

PC/EP 96/05518

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

- 1) Claims 1-9 (partially) : compounds where substituent 'K' is -NH-C1-8-alkyl, -NH-C3-8-alkenyl and -NH-C3-8-alkynyl (assuming that alkynyl = alkynyl).
- 2) Claims 1-4 and 7-9 (partially): subject matter where substituent 'K' is -NH-C6-8-cycloalkyl and -NH-C1-4-alkene-C3-8-cycloalkyl.
- 3) Claims 1-9 (partially) : all other subject matter

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCI, \_P 96/05518

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Form PCT/ISA/210 (patent family annex) (July 1992)